



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/815,081

03/31/2004

Seth Adams

7342

7590

06/28/2006

Myles Walsh, III
Cape Cod Research
19 Research Road
East Falmouth, MA 02536

EXAMINER

AKANBI, ISIAKA O

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/815,081	ADAMS ET AL.	
	Examiner	Art Unit	
	Isiaka O. Akanbi	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The examiner approves the drawings filed 31 March 2004.

Claim Rejections - 35 USC § 102

Claims 1-3, 5-7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Johansen (2003/0048452 A1).

As regard to claims 1 and 8, Johansen discloses a method/apparatus for conducting a plurality of assays for a plurality of different analytes in a carrier that may contain said different analytes comprising of the following:

providing a surface plasmon resonance active Surface (230/220/240), associating a plurality of different extended coupling matrices (250) to said surface, contacting said surface with said carrier, wherein the presence or absence of a specific analyte results in an increase, a decrease or change in the indices of refraction of said extended coupling surfaces, detecting (500) said changes said indices refraction by measuring the SPR profile, wherein the SPR profile distinguishable between said different extended coupling matrices (figs. 2, 7 and 8)(figs. 11 and 14)(page 2, par. 0042, page 3, par. 0062).

As to claim 2, according to claim 1, Johansen discloses wherein the said active surface is thin metal film (page 1, par. 0005)(.

As to claims 3 and 5, Johansen discloses wherein said thin metal film is selected from the group consisting of gold, copper, silver, aluminum (page 3, par. 0043).

As to claim 6, Johansen discloses wherein said carrier is air (fig. 3)(page 4, par. 0067)

As to claim 7, Johansen discloses wherein said analytes are selected from the group consisting of chemical agent, biological agent and toxic industrial chemical (page 1, par. 0004)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2877

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johansen (2003/0048452 A1) in view of Nakamura et al. (6,495,328 B2)

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over of Johansen in view of Nakamura, as applied to claim 1. The reference of Johansen teaches of the features of claim 1, comprising coupling matrices (figs. 2, 7 and 8), however the reference of Johansen is silent regarding the coupling matrices are covalently bound through sulfur bonds to alkyl chains of length (i.e. from 2 to 20 carbons). Generally the coupling matrices that is covalently bound through sulfur bonds to alkyl chains is known in the art as evident by Nakamura. The reference of Nakamura teaches of the formation (SAM)(fig. 2)(col. 3, line 31-40). It would have been obvious to one having ordinary skill in the art at the time of invention to use coupling matrices that are covalently bound through sulfur bonds to alkyl chains of length (i.e. from 2 to 20 carbons) for the purpose of providing a more accurate measurement/detection.

Additional Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teach of other prior art method/apparatus for conducting a plurality of assays for a plurality of different analytes in a carrier that may anticipate or obviate the claims of the applicant's invention.

Conclusion

Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on (571) 272-2059. The fax phone number

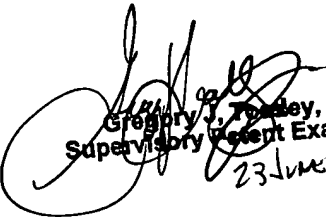
Art Unit: 2877

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi

June 21, 2006


Gregory J. Tinsley, Jr.
Supervisory Patent Examiner
23 June 06